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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/801,702

03/17/2004

Ming Tang Huang

MR2349-1000

1827

4586

7590

09/30/2005

ROSENBERG, KLEIN & LEE

3458 ELLICOTT CENTER DRIVE-SUITE 101

ELLICOTT CITY, MD 21043

EXAMINER

HOFFBERG, ROBERT JOSEPH

ART UNIT

PAPER NUMBER

2835

DATE MAILED: 09/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>		<b>Applicant(s)</b>	
	10/801,702		HUANG, MING TANG	
	<b>Examiner</b>		<b>Art Unit</b>	
	Robert J. Hoffberg		2835	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 17 March 2004.
- 2a) ☐ This action is FINAL.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

***Specification***

1. The disclosure is objected to because of the following informalities: Page 2, line 11, "2404" should be "2404a".

Appropriate correction is required.

***Claim Objections***

2. Claim 1 is objected to because of the following informalities: Page 11, lines 8-9, change in two places, "retaining arm " to "retaining arms". Appropriate correction is required

Claim 3 is objected to because of the following informalities: Page 11, line 15, delete the word "the". Appropriate correction is required.

Claim 9 is objected to because of the following informalities: Page 12, line 16, delete the word "the". Page 12, lines 17-19, change in two places, "retaining arm " to "retaining arms". Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claim 6-9 are rejected under 35 U.S.C. 102(b) as being anticipated by Liang et al. (US 6,525,939).

With respect to Claim 6, Liang et al. teaches a heat sink of a heat dissipation module of an interface card, the heat sink (Fig. 1, #70) comprising: a base (Fig. 1, #21)

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abutting an electrical component (Fig. 1, #71) of the interface card (Fig. 1, #70), and a plurality of fins (Fig. 3, #64) outwardly extending from each side of the base.

With respect to Claim 7, Liang et al. further teaches that the heat sink is made by aluminum extrusion (Col. 1, line 17).

With respect to Claim 8, Liang et al. further teaches that the heat sink has at least one holding portion (Fig. 3, #66) outwardly extending from a side of the base.

With respect to Claim 9, Liang et al. further teaches that the heat sink, wherein at least one holding portion has a connecting arm (part of Fig. 3, #66) outwardly extending from the side of the base, two symmetrical retaining arm (part of Fig. 3, #66) respectively outwardly extending from an end of the connecting arm and a receiving space defined by the two retaining arm.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 1-5 are rejected under 35 U.S.C. 102(b) as being anticipated by Liang et al. (US 6,525,939) in view of Soule et al. (US 5,384,940).

With respect to Claim 1, Liang et al. teaches that a heat dissipation module of an interface card, the heat dissipation module comprising: a heat sink (Fig. 3, #64) having a base (Fig. 1, #21) abutting an electrical component of the interface card (Fig. 1, #70),

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a plurality of fins (see Fig. 3, #64) outwardly extending from each side of the base, at least one holding portion having a connecting arm (part of Fig. 3, #66) outwardly extending from a side of the base, two symmetrical retaining arm (part of Fig. 3, #66) respectively outwardly extending from an end of the connecting arm and a receiving space (part of Fig. 3, #66) defined by the two retaining arm. Liang et al. does not teach the hooking device. Soule et al. teaches at least one hooking device (Fig. 3, #10) received in the receiving space of the at least one holding portion for hooking the heat sink on the interface card. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to replace the screw attachment (Col. 3, line 57) of Liang et al. with the hooking device of Soule et al. as an alternate equivalent means for securing the heat sink to the interface card.

With respect to Claim 2, Liang et al. further teaches the heat sink is made by aluminum extrusion (Col. 1, line 17).

With respect to Claim 3, Soule et al. further teaches at least one hooking device (Fig. 1, #10) has a member sleeve having a sleeve body (Fig. 1, #14) and a circular portion (Fig. 1, #12) outwardly protruding along a rim of a top of the sleeve body, a spring (Fig. 1, #18) compressedly received in the sleeve body of the member sleeve, and a hooking member (Fig. 1, #16) inserted into the spring and an opening of a bottom (Fig. 1, #30) of the sleeve body for hooking the heat sink on the interface card. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the heat dissipation module of Liang et al. with that of Soule et al. for the purpose of using a hooking device to push and hook the heat dissipation module to

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the interface card as an alternate equivalent means for securing the heat sink to the interface card.

With respect to Claim 4, Soule et al. further teaches the hooking member has a hooking member body (Fig. 1, #14), a retaining portion (Fig. 1, #12) outwardly protruding along a rim of a top of the hooking member body, two hooks (Fig. 1, #26 and #28) symmetrically formed on a bottom of the hooking member body, and a notch (Fig. 1, #30) defined by the two hooks. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the heat dissipation module of Liang et al. with that of Soule et al. for the purpose of using a hooking device with a compressible point to retain the heat dissipation module to the interface card.

With respect to Claim 5, Liang et al. further teaches a fan (Fig. 1, #10) mounted on the heat sink (Fig. 1, #20) for providing air to cool the heat sink.


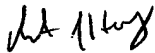
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert J. Hoffberg whose telephone number is (571) 272-2761. The examiner can normally be reached on 8:30 AM - 4:30 PM Mon - Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynn D. Feild can be reached on (571) 272-2092. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

RJH



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